House Committee on Veterans Affairs

Hearing on the Department of Veterans' Affairs Prosthetic Rehabilitation and Research Programs

Thursday, July 22, 2004

9:30 a.m.

Testimony of

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Chairman Smith, Ranking Member Evans, and distinguished members of the Subcommittee: thank you for the opportunity to share a private sector perspective on collaboration among the Department of Veterans' Affairs, the Department of Defense, and industry on veteran amputee care and prosthetic research.

My name is Bert Harman and I am the President and Chief Executive Officer of North and South American operations for Otto Bock Healthcare, located in Minneapolis, MN. With over 80 years of experience and a presence in 140 countries worldwide, and with design and manufacturing operations in Florida, Minnesota, and Utah, Otto Bock is the global leader in developing and manufacturing innovative prosthetic technologies and devices. Our aim is to offer persons with limb loss technological solutions to maximize functionality, enhance productivity and ensure restored independence. Otto Bock is widely known currently as the developer of the microprocessor controlled C-Leg, arguably the most advanced prosthetic technology in use today. I am also appearing on behalf of the orthotic and prosthetic industry, and the many committed providers and companies who stand ready to meet the challenge of ensuring optimal outcomes for military and veteran amputees. Collectively, our industry continues to push the limits of technology and patient care and is eager to maintain, and grow, current collaborations with the DoD and the VA.

I would like to make the following three points in my testimony today:

- The Committee can be very pleased by the growing collaboration among the VA and the DoD, and also the private sector, to provide care and rehabilitation to servicemen and women whose injuries

have resulted in the loss of one or more limbs. Historically, the needs of the military have helped to drive advances in prosthetic technology developed by the private sector, and Otto Bock is proud to be a partner with the VA and DoD to meet the needs of the modern military and veterans. This public-private collaboration is essential to developing high-quality prosthetics to serve all persons with limb loss.

- While Otto Bock is the largest prosthetic manufacturer in the world, we are a relatively small, privately held company with limited research resources. Expanded collaboration with the private sector is essential, particularly in the area of clinical studies and assessments, to continued development of technologies that will significantly improve the lives, health, and productivity of our military and veteran amputees, while also assisting Medicare beneficiaries and other amputees outside of the VA and DoD systems.
- The reinvigoration of prosthetic care and research at the VA and the DoD will serve to further underscore significant deficiencies among medical and scientific communities in the area of clinical and prosthetic research. Simply stated, there currently are too few researchers within the DoD and the VA and the private sector as well, with interest and experience in the field to adequately address

the challenges that we face in dramatically advancing prosthetic care and technology. The amputee population in the U.S. is approximately 1.2 million people. As such they represent a very needy, but, from the business perspective, a very small market. Bringing next generation technologies to this patient population is challenged by the economics of the relatively small scale of the industry. We must do all that is possible, therefore, to ensure that the current renewed focus on amputee care is fully leveraged, including: providing the VA with the necessary support so that internal capacity and competence may be further developed; ensuring that any and all barriers to collaborations between the VA and the DoD are removed so that existing assets may be complimented; and creating a more streamlined, flexible mechanism for the VA to partner with and support innovative research and accelerate product development in conjunction with the private sector.

The human toll exacted by military operations in Afghanistan and Iraq has been widely reported, particularly with respect to those men and women whose injuries have resulted in the loss of one or more limbs. DoD swiftly and effectively addressed the medical rehabilitation and prosthetic care needs of military personnel, and formed an innovative partnership with the VA to transition active duty personnel to VA care and rehabilitation. We applaud the commitment shown by the leadership of both

Departments to ensure that amputees injured in Afghanistan and Iraq are provided with the latest and highest quality prosthetic technologies and care appropriate for their medical needs, and available in the market.

Traumatic amputation is an unfortunate consequence of military engagement. Historically, the increased demand for prosthetic rehabilitation during and following times of war has also driven innovation. For example, hydraulic technology developed for military applications during World War II was adapted for use in prosthetic knee components, and continue in use today. The Vietnam era spawned considerable prosthetic advances, including the development of modern, modular prosthetic components, resulting in greatly expanded technology options, along with the eventual departure from the use of wood in the fabrication of prosthetic limbs.

Currently, the modern military's demands for prosthetic technology that will enable military servicemen and combat veterans to return to close to pre-injury levels of functionality are driving research and program development. DoD's approach to view injured military personnel as "tactical athletes" has set the rehabilitation bar extremely high. This aggressive goal setting is precisely what is needed to further advance the state of science and standard of care in prosthetics.

Otto Bock has enjoyed a very strong relationship with the Amputee Care Center at the Walter Reed Army Medical Center and stands prepared to expand its collaboration. We are convinced that collaborative partnerships among Walter Reed, the VA and the private sector, if fully supported, will enable the best and most current technologies, from

other business segments, to be integrated into next generation prosthetic technologies in order to enable these dedicated individuals to pursue their lives – military or civilian.

Investments must be made to further adapt these existing technologies, and develop *new* advancements to meet the demands of military and veteran applications. I want to thank the House of Representatives for its commitment to this pressing need, and in particular I want to recognize Representative Bill Young for championing $10 million in FY 05 support -- above and beyond the support provided for direct patient care and operations of the Amputee Care Center -- for advanced prosthetic research to be administered by Walter Reed.

The DoD/VA collaboration also extends to clinical studies. As an active participant with Walter Reed and the VA in the development of clinical assessments, we have been very impressed by the partnership between the two agencies, and in particular the aggressive response by the VA to allocating necessary resources to begin meeting the demands in this area. For example, while staff of the Amputee Care Center at Walter Reed was focused, appropriately, on patient care, VA personnel identified and supported a VA researcher to be located at Walter Reed to coordinate clinical research studies. Additionally, while specific expertise was needed to coordinate lower-limb clinical and technology assessments, the VA effectively recruited a highly respected researcher in the field from the Mayo Clinic to lead and oversee this work.

Good, solid clinical studies are essential to ensuring that any technology is suitable for specific populations and applications. Clinical research on amputee populations is also an area where the challenges of a small, dispersed, patient population

have limited the rate of treatment advances in the category. For example, for some highly specialized therapies of the upper extremities, there are only a few hundred patients in the whole country with a need for prosthetic assistance. Without the assistance of the VA and DoD, it would be virtually impossible to execute and direct clinical research on this patient population by any private company. But the VA and DoD, with access to focused patient populations are in a better position than anyone in the world to assist in the conducting of the basic research needed to improve their lives. Advanced technologies such as the C-Leg, which initially was believed to benefit primarily active amputees, are beginning to demonstrate promising benefits for the moderately active patient and even for aging veteran amputees as well. Microprocessor controlled knee components, for example, provide greater confidence in descending stairs and inclines, and in navigating uneven terrain. These could contribute to fewer falls and resultant injuries among the aging amputee population.

Additionally, these advanced prosthetic devices offer reduced energy consumption during ambulation, encouraging aging veterans to be more active. For veterans with chronic conditions such as diabetes and cardiovascular disease, higher levels of physical activity will help to dramatically reduce devastating and costly secondary complications. But executing good clinical research to document exactly which care pathways to follow is an expensive proposition, one which the prosthetic industry is embracing. But due to its small size, the prosthetic industry is doing so on a timeline far slower than is desirable to meet the growing needs for both the military, veteran or civilian amputee population. The VA has recognized this and is actively

collaborating with us on further clinical research in this promising area of amputee treatment.

A further example of VA collaboration is the clinical testing that is planned to assess the benefit of vacuum assisted socket systems. This research activity will evaluate these technologies and seek to determine the effect of vacuum pressure resulting in improved circulation, on patients' residual limbs health. Otto Bock is very encouraged by the commitment by the VA and the DoD to work with the private sector to gain the benefit of the industry's experience and recommendations to address these challenging issues, while at the same time further contributing to our own knowledge base.

In closing, the collaboration between the VA and the DoD is working. This partnership can be enhanced even more, in order to have the optimal, dramatic, long-term effect on amputee patient care that we all hope it will. I urge the Committee to fully support the efforts of the VA and its renewed emphasis on amputee care and research through the FY05 budget process. To further advance the standard of care in prosthetics, and to improve patient outcomes, I recommend that the committee explore how additional prosthetic clinical research capacity and talent may be developed within the VA. I also suggest that a streamlined process for private sector collaborations and partnerships be explored so that the time from innovation to application may be greatly accelerated.

Otto Bock Healthcare, along with the entire prosthetic industry, is committed to enhancing its partnership with the VA and DoD to achieve optimal results for those men

and women who have so bravely served our country. I know you share this goal, and appreciate your attention and the opportunity to testify before you today.

Thank you.